

DN A01280A

PATENT

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1-2.(cancelled).
3. (currently amended). A process for preparing a polymer, wherein the process comprises the steps of:
 - providing a reaction mixture comprising at least one polar monomer, at least one water-soluble multivalent cation, and optionally at least one ethylenically unsaturated monomer;
 - providing a monomer mixture comprising at least one polar monomer and optionally at least one ethylenically unsaturated monomer;
 - adding a portion of the monomer mixture to the reaction mixture to form a polymer seed;
 - adding the remainder of the monomer mixture to the reaction mixture on a gradual basis;
 - and
 - emulsion polymerizing the monomer mixture to form the polymer.
4. (previously presented) The process of claim 3 wherein the reaction mixture in the providing step comprises at least 25% by weight of the total amount of polar monomer.
5. (previously presented) The process of claim 4 wherein the reaction mixture in the providing step comprises at least 50% by weight of the total amount of polar monomer.
6. (previously presented) The process of claim 3 wherein the amount of the polar monomer relative to the amount of the multivalent cation, in molar equivalents, is at least two to one.
7. (previously presented). The process of claim 6 wherein the amount of the polar monomer relative to the amount of the multivalent cation is sufficient to neutralize the ionic charge of the multivalent cation.

8. (previously presented). The process of claim 3 wherein said polar monomer comprises an acid containing monomer.

9. (original). The process of claim 8 wherein said acid containing monomer is selected from the group consisting of methacrylic anhydride, acrylic acid, methacrylic acid, itaconic acid, maleic acid, fumaric acid, acryloxypropionic acid, (meth)acryloxypropionic acid, styrene sulfonic acid, ethylmethacrylate-2-sulphonic acid, 2-acrylamido-2-methylpropane sulphonic acid; phosphoethylmethacrylate; the corresponding salts of the acid containing monomer, and combinations thereof.

10. (cancelled).

11. (previously presented). The process of claim 3 wherein said polar monomer comprises a low molecular weight, polymeric stabilizer.

12. (previously presented). The process of claim 3 wherein the multivalent cation comprises at least one cation selected from the group consisting of divalent cations and trivalent cations.

13. (previously presented). The process of claim 3 wherein the reaction mixture further comprises at least one ethylenically unsaturated monomer.

14. (previously presented). The process of claim 13 wherein the at least one ethylenically unsaturated monomer is selected from the group consisting of: C₁ - C₁₈ alkyl (meth)acrylate, 2-ethylhexyl (meth)acrylate, isobornyl (meth)acrylate, lauryl (meth)acrylate, allyl (meth)acrylate, stearyl (meth)acrylate, acrylic acid, itaconic acid, methacrylic acid, butadiene, vinyl acetate, vinyl versate, styrene, vinyl aromatic monomers, divinylbenzene, divinylpyridine, divinyltoluene, diallyl phthalate, butylenc glycol di(meth)acrylate, ethylene glycol di(meth)acrylate, divinylxylene, divinylethylbenzene, divinylsulfone, divinylketone, divinylsulfide, diallyl maleate, diallyl fumarate, diallyl succinate, diallyl carbonate, diallyl malonate, diallyl oxalate, diallyl adipate, diallyl sebacate, divinyl sebacate, diallyl tartrate, diallyl silicate, triallyl tricarballate, triallyl aconitate, triallyl citrate, triallyl phosphate, N,N -methylene dimethacrylamide, N,N -methylene dimethacrylamide, N,N -ethylenediacrylamide, trivinylbenzene, and the polyvinyl

ethers of glycol, glycerol, pentaerythritol, resorcinol, monothio and dithio derivatives of glycols, and combinations thereof.

15. (currently amended). The process of claim 3 wherein said ~~polymerizing step~~
~~comprises emulsion polymerization~~ comprises inverse emulsion polymerization.

16-18.(cancelled).

19. (previously presented). The process of claim 3 wherein the glass transition temperature of said polymer is in the range of from -80°C to 50°C.

20. (previously presented). The process according to claim 3, wherein the glass transition temperature of said polymer is in the range of from -80 °C to 140 °C.

21-22. (cancelled).